

SAFETY DATA SHEET

1. Identification

Product identifier	Turf Pride Granular 40-0-0 (NUTRALENE	® fertilizer)	
Other means of identification			
Product code	KAS_NUTRALENE_US_EN		
Synonyms	NUTRALENE® 40-0-0 fertilizer * NUTRALENE® Micro 40-0-0 fertilizer * NUTRALENE® Mini 40-0-0 fertilizer * NUTRALENE® Standard 40-0-0 fertilizer		
Recommended use	Fertilizer.		
Recommended restrictions	Use in accordance with supplier's recommendations.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer/Supplier Emergency	Koch Agronomic Services, LLC 4111 E 37th St N Wichita, KS 67220 US kochmsds@kochind.com 1.866.863.5550 For Chemical Emergency Call CHEMTREC day or night USA/Canada - 1.800.424.9300 Mexico - 1.800.681.9531 Outside USA/Canada - 1.703.527.3887 (collect calls accepted)	Distributed by: Plant Products Inc 50 Hazelton St., Leamington, ON N8H 3W1 1-800-387-2449 www.plantproducts.com	
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	The mixture does not meet the criteria for cl	lassification.	
Precautionary statement			
Prevention	Observe good industrial hygiene practices.		
Response	Wash hands after handling.		
Storage	Store away from incompatible materials.		

Disposal Hazard(s) not otherwise classified (HNOC)

3. Composition/information on ingredients

MixturesChemical nameCAS number%Urea formaldehyde polymer9011-05-695 - 100Urea57-13-6< 5</td>DyeProprietary< 0.1</td>

Dispose of waste and residues in accordance with local authority requirements. None known.

Composition comments	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.	
	This Safety Data Sheet is not a guarantee of product specification or NPK value(s). NPK content is on specified sales orders, customer invoices, or product specification sheets obtained from supplier.	
4. First-aid measures		
Inhalation	Move to fresh air. Get medical attention if any discomfort continues.	
Skin contact	Wash with soap and water. Get medical attention if irritation develops or persists.	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.	
Ingestion	Rinse mouth. Get medical attention if any discomfort continues.	
Most important symptoms/effects, acute and delayed	Eye contact: Symptoms can include irritation, redness, scratching of the cornea, and tearing. Skin contact: Mild skin irritation. Dust may irritate throat and respiratory system and cause coughing.	
Indication of immediate medical attention and special treatment needed	Treat symptomatically.	
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.	
5. Fire-fighting measures		
Suitable extinguishing media	Water fog. Water spray. Carbon dioxide (CO2). Foam.	
Unsuitable extinguishing media	None known.	
Specific hazards arising from the chemical	Irritating and toxic gases or fumes may be released during a fire.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.	
Fire fighting equipment/instructions	Move containers from fire area if you can do it without risk. Use standard firefighting procedures and consider the hazards of other involved materials.	
General fire hazards	Bulk material is non-combustible. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.	
6. Accidental release measures		
Personal precautions, protective equipment and emergency procedures	Avoid inhalation of dust and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing. For personal protection, see section 8 of the SDS.	
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. After removal flush contaminated area thoroughly with water.	
	Never return spills to original containers for re-use.	
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers or watercourses.	

7. Handling and storage

Precautions for safe handling	Keep away from all ignition sources including heat, sparks and flame. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Avoid inhalation of dust and contact with skin and eyes. Use only with adequate ventilation. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Dust (CAS -)	PEL	5 mg/m3	Respirable fraction.
	==	15 mg/m3	Total dust.
US. OSHA Table Z-3 (29 C	FR 1910.1000)		
Components	Туре	Value	Form
Dust (CAS -)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	Form
Dust (CAS -)	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	Inhalable particles.
US. Workplace Environme	ental Exposure Level (WEEL) Guides		
Components	Туре	Value	Form
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.
ological limit values	No biological exposure limits noted for	the ingredient(s).	
posure guidelines	Follow standard monitoring procedure		
propriate engineering	It is recommended that all dust control		aust ventilation and material
	to prevent the escape of dust into the		
		vork area (i.e., there is no lea equipment and powered indu	akage from the equipment). U strial trucks. Provide adequat
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Not available. Not available.

Not available.

Odor threshold

Melting point/freezing point

рΗ

Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Chemical family	Modified Urea Polymer
10. Stability and reactivity	
Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Hazardous reactions do not occur.
Conditions to avoid	Heat. Extreme temperatures.
Incompatible materials	Strong oxidizing agents. Acids. Alkalis.
Hazardous decomposition products	Ammonia. Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure			
Inhalation	Dust may irritate respiratory system.		
Skin contact	May cause irritation through mechanical abrasion.		
Eye contact	Dust may irritate the eyes.		
Ingestion	Ingestion may cause irritation and malaise.		
Symptoms related to the physical, chemical and toxicological characteristics	Eye contact: Symptoms can include irritation, redness, scratching of the cornea, and tearing. Skin contact: Mild skin irritation. Dust may irritate throat and respiratory system and cause coughing.		

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.SpeciesTest Results	
Components		
Urea (CAS 57-13-6)		
Acute		
Oral		
LD50	Rat	14300 mg/kg
Skin corrosion/irritation	May cause irritation through mechanical abrasion.	

Serious eye damage/eye irritation	May cause irritation through mechanical abrasion.
Respiratory or skin sensitization	1
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not classified.
OSHA Specifically Regulate	d Substances (29 CFR 1910.1001-1050)
Not listed.	
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Inhalation of dusts may cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Not applicable.
Chronic effects	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases. Prolonged exposure may cause chronic effects.
Further information	No other specific acute or chronic health impact noted.

- 12. Ecological information
- Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Urea (CAS 57-13-6)			
Aquatic			
Fish	LC50	Leuciscus idus	> 6810 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		y of this product.
Bioaccumulative potential	Not expected to bioconcentrate or bioaccumulate.		
Partition coefficient n-octa	nol / water (log Kow)	

Urea (CAS 57-13-6)	-2.11
Mobility in soil	This product is water soluble and may disperse in soil.
Other adverse effects	No data available.

13. Disposal considerations

Disposal instructions	Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Hazard categories

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

Country(s) or region

Inventory name

On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

country(s).

16. Other information, including date of preparation or last revision

Issue date	27-May-2015
Revision date	-
Version #	01
Further information	$HMIS^{\texttt{R}}$ is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0



List of abbreviations

	LD50: Lethal Dose, 50%. LC50: Lethal Concentration, 50%.
References	NLM: Hazardous Substances Data Base HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Disclaimer	NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet (SDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of this (M)SDS.